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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Garner T. Hauptert, Jr.
Application No.: 10/803,185
Filed: March 16, 2004
Confirmation No.: 5106
Title: Methods for Screening HIF Like Ouabain-Resistant Na⁺-K⁺-ATPase Agents



Group Art Unit: 1614
Examiner: Not assigned

CERTIFICATE OF MAILING OR TRANSMISSION	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, or is being facsimile transmitted to the United States Patent and Trademark Office on:	
July 27, 2004 Date	Jenine Crump Signature
Jenine Crump Typed or printed name of person signing certificate	

INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Information Disclosure Statement is submitted:

☐ under 37 CFR 1.129(a), or
(First/Second submission after Final Rejection)

☒ under 37 CFR 1.97(b), or
(Within any one of the following time periods: three months of filing national application (other than a CPA) or date of entry of the national stage in an international application; or before the mailing date of a first office action on the merits in a non-provisional application, including a CPA, or a Request for Continued Examination).

☐ under 37 CFR 1.97(c) together with either:
☐ a Statement under 37 CFR 1.97(e), as checked below, or
☐ a \$180.00 fee under 37 CFR 1.17(p), or
(After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)

☐ under 37 CFR 1.97(d) together with:
☐ a Statement under 37 CFR 1.97(e), as checked below, and
☐ a \$180.00 fee under 37 CFR 1.17(p), or
(Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee)

☐ under 37 CFR 1.97(i):
Applicant requests that the IDS and cited reference(s) be placed in the application filewrapper.
(Filed after payment of issue fee)

Statement Under 37 CFR 1.97(e)

- ☐ Each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or
- ☐ No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

Statement Under 37 CFR 1.704(d) (Patent Term Adjustment)

Applies to original applications (other than design) filed on or after May 29, 2000

- ☐ Each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in § 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.

☒ Enclosed herewith is form PTO-1449:

☐ Copies of the cited references are enclosed.

☒ Copies of the cited references are enclosed (AN and AV3), except those entered in prior application, U.S. Application No. 09/220,913, to which priority under 35 U.S.C. 120 is claimed. The earlier application contains copies of the cited references.

☒ Since this application was filed after June 30, 2003, copies of issued U.S. patents and published U.S. applications are not required and are not being provided.

☐ The listed references were cited in the enclosed International Search Report in a counterpart foreign application.

☐ The "concise explanation" requirement (non-English references) for reference(s) [] under 37 CFR 1.98(a)(3) is satisfied by:

☐ the explanation provided on the attached sheet.

☐ the explanation provided in the Specification.

☐ submission of the enclosed International Search Report.

☐ submission of the enclosed English-language version of a foreign Search Report and/or foreign Office Action.

☐ the enclosed English language abstract.

☐ Applicant requests that the following non-published pending applications be considered:

Examiner's
Initials

_____ U.S. Patent Application No. [], by [inventor(s)], filed [], Docket No.: []

_____ U.S. Patent Application No. [], by [inventor(s)], filed [], Docket No.: []

_____ U.S. Patent Application No. [], by [inventor(s)], filed [], Docket No.: []

Examiner

Date

☐ A copy of each above-cited application, including the current claims, is enclosed.

☐ A copy of each above-cited application, including the current claims, is enclosed, except those entered in prior application, U.S. Application No. [], to which priority under 35 U.S.C. 120 is claimed.

The Examiner is requested to return a copy of the above list of pending applications indicating which references were considered with the next office communication.

It is requested that the information disclosed herein be made of record in this application.

Method of payment:

☐ A check for the fee noted above is enclosed, or the fee has been included in the check with the accompanying Reply. A copy of this Statement is enclosed.

☐ Please charge Deposit Account 08-0380 in the amount of \$[]. A copy of this Statement is enclosed.

☒ Please charge any deficiency in fees and credit any overpayment to Deposit Account 08-0380.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

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Dated: July 27, 2004

PTO-1449 REPRODUCED

ATTORNEY DOCKET NO.

0838.1002-003

APPLICATION NO.

10/803,185

INFORMATION DISCLOSURE CITATION
IN AN APPLICATION

July 27, 2004

(Use several sheets if necessary)

FIRST NAMED INVENTOR

Garner T. Hauptert, Jr.

FILING DATE

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EXAMINER

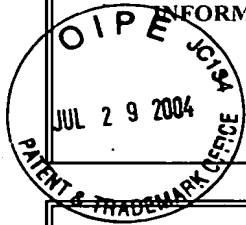
Not Yet Assigned

CONFIRMATION NO.

5106

GROUP

1614



U.S. PATENT DOCUMENTS

EXAM- INER INI- TIAL	REF. NO.	DOCUMENT NUMBER Number-Kind Code (if known)	ISSUE DATE / PUBLICATION DATE MM-DD-YYYY	NAME OF PATENTEE OR APPLICANT OF CITED DOCUMENT
	AA	5,716,937	02-10-1998	Hauptert, Jr.
	AB	5,910,484	06-08-1999	Hauptert, Jr.
	AB			
	AC			
	AD			
	AE			
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	AG			
	AH			
	AI			
	AJ			
	AK			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER Country Code-Number-Kind Code (if known)	DATE MM-DD-YYYY	NAME OF PATENTEE OR APPLICANT OF CITED DOCUMENT	TRANSLATION YES NO	
	AL	WO 98/53832	12-03-1988	The General Hospital Corporation		
	AM	WO 97/19099	05-29-1997	Loma Linda University Medical Center		
	AN	WO 00/011017	03-02-2000	The Trustees of Columbia University in the City of New York		
	AO					
	AP					
	AQ					

EXAMINER

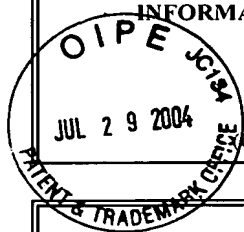
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	Anner, B.M., <i>et al.</i> , "Right-Side-Out Pumping Na, K-ATPase-Liposomes: A New Tool to Study the Enzyme's Receptor Function," <i>Biophys. Res. Commun.</i> , 129:102-108 (1985).
AS	Anner, B.M., <i>et al.</i> , "Hypothalamic Na ⁺ -K ⁺ -ATPase Inhibitor Characterized in Two-Sided Liposomes Containing Pure Renal Na ⁺ -K ⁺ -ATPase," <i>Am. J. Physiol.</i> , 258:F144-F153 (1990).
AT	Carilli, <i>et al.</i> , "Hypothalamic factor inhibits the (Na, K) ATPase from the extracellular surface," <i>J. Biol. Chem.</i> , 260:1027-1031 (1985).
AU	Crabos, <i>et al.</i> , "Atrial natriuretic peptide regulates release of Na ⁺ -K ⁺ -ATPase inhibitor from rat brain," <i>Am. J. Physiol.</i> , 254:F912-F917 (1988).
AV	Croyle, M.L., <i>et al.</i> , "Extensive Random Mutagenesis Analysis of the Na ⁺ /K ⁺ -ATPase α Subunit Identifies Known and Previously Unidentified Amino Acid Residues that Alter Ouabain Sensitivity," <i>Eur. J. Biochem.</i> , 248(2):488-495 (1997).
AW	De Angelis, C., <i>et al.</i> , "Hypoxia Triggers Release of an Endogenous Inhibitor of Na ⁺ -K ⁺ -ATPase from Midbrain and Adrenal," <i>Am. J. Physiol.</i> , 274:F182-F188 (1998).
AX	Decollogne, <i>et al.</i> , "Biochemical characterization of the Na ⁺ /K ⁺ -ATPase isoforms in human heart," The Sodium Pump, Bamberg and Schoner (eds) pp. 812-815 (1994).
AY	Doucet, <i>et al.</i> , "Determination of Na-K-ATPase activity in single segments of the mammalian nephron," <i>Am. J. Physiol.</i> , 237(2):F105-F113 (1979).
AZ	Ferrandi, M., <i>et al.</i> , "Ouabainlike Factor in Milan Hypertensive Rats," <i>Am. J. Physiol.</i> , 263:F739-F748 (1992).
AR2	Hauptert, G., <i>et al.</i> , "Hypothalamic sodium-transport inhibitor is a high-affinity reversible inhibitor of Na ⁺ -K ⁺ -ATPase," <i>Am. J. Physiol.</i> , 247:F919-F924 (1984).
AS2	Hauptert, G.T., "Structure and Biological Activity of the Na ⁺ /K ⁺ -ATPase Inhibitor Isolated from Bovine Hypothalamus: Difference from Ouabain," The Sodium Pump, Bamberg and Schoner (eds), Steinkopff & Darmstadt (pub), N.Y., pp. 732-742 (1994).
AT2	Holzinger, <i>et al.</i> , "Molecular basis for the insensitivity of the Monarch (<i>Danaus plexippus</i>) to cardiac glycosides," <i>FEBS</i> 314:477-480 (1992).

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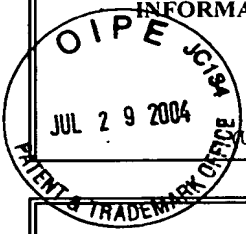
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AU2	Jaisser, <i>et al.</i> , "Primary sequence and functional expression of a novel ouabain-resistant Na, K-ATPase," <i>J. Biol. Chem.</i> 267:16895-16903 (1992).
AV2	Janssens, S.P., <i>et al.</i> , "Hypothalamic Na ⁺ , K ⁺ -ATPase Inhibitor Constricts Pulmonary Arteries of Spontaneously Hyperactive Rats," <i>Journal of Cardiovascular Pharmacology</i> , 22(Suppl. 2), S42-S46 (1993).
AW2	Levenson, R., "Isoforms of the Na, K-ATPase: Family Members in Search of Function," <i>Rev. Physiol. Biochem. Pharmacol.</i> , 123:1-45 (1994).
AX2	Lingrel, J.B., <i>et al.</i> , "Na, K-ATPase: Cardiac Glycoside Binding and Functional Importance of Negatively Charged Amino Acids of Transmembrane Regions," <i>The Sodium Pump</i> (Bamberg and Schoner, Ed.) pp. 276-286 (1994).
AY2	Sancho, J.M., <i>et al.</i> , "A Non-Ouabain Na/K ATPase Inhibitor Isolated from Bovine Hypothalamus. Its Relation to Hypothalamic Ouabain," <i>Clin. and Exper. Hypertension</i> , 20(5&6):535-542 (1998).
AZ2	Shull, <i>et al.</i> , "Molecular cloning of three distinct forms of the Na ⁺ , K ⁺ -ATPase α -subunit from rat brain," <i>Biochemistry</i> , 25:8125-8132 (1986).
AR3	Shyjan, <i>et al.</i> , "Antisera specific for the α 1, α 2, α 3, and β subunits of the Na, K-ATPase: Differential Expression of α and β subunits in rat tissue membranes," <i>Biochemistry</i> , 28:4531-4535 (1989).
AS3	Sweadner, Kathleen J., "Isozymes of the Na ⁺ /K ⁺ -ATPase," <i>Biochem. Biophys. Acta.</i> , 988:185-220 (1989).
AT3	Sweadner, J., "Enzymatic properties of separated isozymes of the Na, K-ATPase," <i>J. Biol. Chem.</i> , 260:11508-11513 (1985).
AU3	Tymiak, <i>et al.</i> , "Physicochemical characterization of a ouabain isomer isolated from bovine hypothalamus," <i>Proc. Natl. Acad. Sci. USA</i> , 90:8189-8193 (1993).
AV3	Zhao, <i>et al.</i> , "Na, K-ATPase inhibitors from bovine hypothalamus and human plasma are different from ouabain: Nanogram scale CD structural analysis," <i>Biochem.</i> 34(31):9893-9896 (1995).

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